

REMARKS

This Application has been carefully reviewed in light of the Office Action transmitted August 12, 2008 ("*Office Action*"). Claims 1, 3-20, 22-38, and 40-47 are pending and rejected in the Application. Applicant amends Claims 1, 20, 29, 38, and 47. Additionally, Applicant cancels Claims 2, 21, 30, and 39 without prejudice or disclaimer. Applicant respectfully requests issuance of the remaining claims.

Examiner's Use of Official Notice

In Applicant's previous Response transmitted June 30, 2008, Applicant traversed the Official Notice taken by the Examiner of particular elements that the Examiner asserts are well-known. In response, the Examiner contends that Applicant's traversal is deficient and cites a selected portion of M.P.E.P. § 2144.03(C). *Office Action*, p. 11. As a threshold matter, Applicant notes that "[i]f the traverse was inadequate, the examiner should include an explanation as to why it was inadequate." M.P.E.P. § 2144.03(C). The Examiner did not include such an explanation. Nevertheless, it remains Applicant's position that the Examiner's use of Official Notice is improper. Applicant respectfully submits that the noticed facts are not considered to be common knowledge or well-known in the art. Further, as noted in Applicant's previous Response, "specific knowledge of the prior art must **always** be supported by citation to some reference work recognized as standard in the pertinent art." M.P.E.P. § 2144.03(A) (emphasis added). For example, with regard to Claim 6, the Examiner takes Official notice that "both the concepts and advantages of providing for queue bypass is well known and expected in the art." Applicant respectfully asserts that the facts the Examiner has attempted to establish by Official Notice represent statements of the Examiner's knowledge of what is allegedly prior art. As a result, the Examiner's use of such Official Notice is improper pursuant to M.P.E.P. § 2144.03(A), and any rejection relying on such Official Notice is legally deficient. Furthermore, Applicant respectfully requests that, if the Examiner intends to continue to rely on any form of Official Notice to reject any of the claims of this Application, the Examiner provide a signed affidavit attesting to the subject matter of the Examiner's Official Notice as required by M.P.E.P. § 2144.03.

Drawings

Applicant has included a proposed drawing correction of FIGURE 1 for the Examiner's approval. Applicant has amended FIGURE 1 to replace the text "CONTACT MANAGER" with "CONTEXT MANAGER." A Replacement Sheet containing FIGURE 1 is attached as Exhibit A and an Annotated Sheet is attached as Exhibit B. Applicant respectfully submits that no new matter has been added.

Objection to the Specification

The Examiner objects to the Specification "as failing to provide proper antecedent basis for the claimed subject matter." *Office Action*, p. 2. Specifically, the Examiner states the "specification fails to disclose the term 'computer-readable medium'" recited in Claims 38 and 40-46. Applicant respectfully traverses this objection for the following reasons.

The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. 37 C.F.R. § 1.75(d)(1). The meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import. M.P.E.P. § 608.01(o).

While the particular term "computer-readable medium" may not be explicitly recited in Applicant's Specification, its meaning would be abundantly clear to one of ordinary skill in the art, both based on the ordinary meaning of the term itself and Applicant's Specification. For example, at least FIGURE 2 and Page 21, line 17 to Page 24, line 16 of Applicant's Specification is replete with discussion of processors, memory, and logic. One of ordinary skill in the art would understand that logic is generally embodied on a computer-readable medium. For at least these reasons, Applicant submits that the Specification provides ample antecedent basis for the term "computer-readable medium" and respectfully requests that the Examiner withdraw the objection to the Specification.

Claim Rejections Under 35 U.S.C. § 101

The Examiner rejects Claims 20 and 22-28 under 35 U.S.C. § 101 "because they fail to establish a statutory category of invention." *Office Action*, p. 2. Applicant respectfully traverses this rejection for the following reasons.

Claims 20 and 22-28 claim a context manager for handling migration of packet processing. The Examiner asserts that the context manager “can be implemented solely as software.” *Office Action*, p. 2. According to the Examiner, “[i]f a claim recites that it may be implemented solely as software, then it can be implemented as software, and therefore covers non-statutory embodiments.” *Office Action*, p. 11-12. Applicant respectfully submits that the Examiner’s position is incorrect for at least two reasons. First, Applicant notes that Claims 20 and 22-28 do not recite that the context manager may be implemented solely as software. Second, as illustrated in FIGURE 2 and described on pages 20-24 of the specification, the claimed “context manager” is not limited only to embodiments that are comprised solely of software or that are implemented solely in software. For example, at least page 20, lines 16-20 of the specification recites an example embodiment where the context manager may be implemented by a device: “while illustrated as including an integrated context manager 14, this element may be implemented by an add-on or external device. In this scenario, context manager 14 may enable the retrofitting of existing and/or future multiprocessor systems that are not inherently capable of implementing migration techniques.” Independent Claim 20 and all claims depending therefrom satisfy the Federal Circuit’s recently articulated machine or transformation test. Thus, Independent Claim 20 and all claims depending therefrom are directed towards statutory subject matter. Applicant respectfully requests reconsideration and allowance of Claims 20 and 22-28.

Claim Rejections Under 35 U.S.C. § 103

A. Claims 1, 3-6, 9-11, 13-20, 22-25, 27, 29-33, 35, 37, 38, 40-42, 44, 46, and 47 are patentable over the *Melvin-Johnson-Bunce* combination

The Examiner rejects Claims 1, 3-6, 9-11, 13-20, 22-25, 27, 29-33, 35, 37, 38, 40-42, 44, 46, and 47 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent Application No. 2003/0069920 to Melvin et al. (“*Melvin*”) in view of U.S. Patent No. 6,684,395 to Johnson et al. (“*Johnson*”) and in view of U.S. Patent No. 6,836,808 to Bunce et al. (“*Bunce*”). Applicant respectfully traverses this rejection and submits that *Melvin*, *Johnson*, and *Bunce*, whether taken alone or in combination, fail to teach or suggest each and every limitation of the claims.

Consider Applicant’s independent Claim 1 which recites:

A system for packet processing, the system comprising:

a shared memory maintaining a plurality of code partitions, the code partitions together implementing a feature set for packet processing;

a plurality of processors each comprising a processor core and an instruction memory loaded with at least one of the code partitions from the shared memory, the processor core operable to execute the loaded code partition to perform processing of packets and to generate migration requests for transferring packet processing operations from the loaded code partition;

a context manager operable to receive a migration request from one of the loaded code partitions executing within one of the processor cores, the migration request comprising packet context information and identifying a target one of the code partitions, the context manager further operable, in response to the migration request, to identify an available one of the processors having the target code partition loaded, and to communicate the packet context to the available one of the processors;

wherein the context manager maintains a plurality of queues each corresponding to one of the code partitions, the context manager further operable, in response to the migration request, to place migration data comprising the packet context information into the queue associated with the target code partition, to monitor the queue associated with the target code partition, and upon determining that one of the processors having the target code partition loaded is available for processing, to communicate the packet context information to the available one of the processors.

Among other aspects, *Melvin*, *Johnson*, and *Bunce*, both alone and in combination, fail to disclose, teach, or suggest a context manager operable “in response to the migration request, to identify an available one of the processors having the target code partition loaded,” as recited by amended Claim 1. As teaching the previously presented version of Claim 1, the Examiner points to paragraphs 0630-0632 of *Melvin*. *Office Action*, p. 4. In the cited portion, *Melvin* discloses a round-robin scheme. Para. 0632. *Melvin* explains that the round-robin scheme **selects a non-busy destination**. Para. 0632. Applicant respectfully submits that selecting a non-busy destination does not teach or suggest “identify[ing] an available one of the processors **having the target code partition loaded**,” (emphasis added) as amended Claim 1 requires. *Johnson* and *Bunce* fail to remedy the deficiencies of *Melvin*. As a result, the proposed *Melvin*, *Johnson*, and *Bunce* combination fails to disclose a context manager operable “in response to the migration request, to identify an available one of the processors having the target code partition loaded.”

Independent Claims 20, 29, 38, and 47 include elements that, for reasons substantially similar to those discussed above with respect to Claim 1, are not disclosed, taught, or suggested by the cited references. Claims 1, 20, 29, 38, and 47 are thus allowable for at least

these reasons. Applicant respectfully requests reconsideration and allowance of Claims 1, 20, 29, 38, and 47 and their respective dependent claims.

B. Claims 7, 8, 12, 26, 28, 34, 36, and 45 are patentable over the *Melvin-Johnson-Bunce-Alam* combination

The Examiner rejects Claims 7, 8, 12, 26, 28, 34, 36, and 45 under 35 U.S.C. § 103(a) as unpatentable over *Melvin*, *Johnson*, and *Bunce* and further in view of U.S. Patent No. 7,340,535 to Alam ("*Alam*").

As described above, *Melvin*, *Johnson*, and *Bunce* fail to teach or suggest each and every limitation of independent Claims 1, 20, 29, and 38. Accordingly, *Melvin*, *Johnson*, and *Bunce* fail to teach or suggest each and every limitation of Claims 7, 8, 12, 26, 28, 34, 36, and 45 because these dependent claims incorporate the limitations of their respective independent claims. *Alam* fails to remedy the deficiencies of *Melvin*, *Johnson*, and *Bunce*.

Thus, *Melvin*, *Johnson*, *Bunce*, and *Alam* whether taken alone or in combination, fail to teach or suggest each and every limitation of Claims 7, 8, 12, 26, 28, 34, 36, and 45. Because the references fail to teach or suggest each and every limitation of the claims, Applicant respectfully requests reconsideration and allowance of Claims 7, 8, 12, 26, 28, 34, 36, and 45.

CONCLUSION

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending Claims. If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, the undersigned attorney for Applicant stands ready to conduct such a conference at the convenience of the Examiner.

No fees are believed to be due, however, the Commissioner is hereby authorized to charge any fees or to credit any overpayments to **Deposit Account No. 02-0384 of Baker Botts L.L.P.**

Respectfully submitted,

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